

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

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Civil Engineering

**INTEGRATED PEST MANAGEMENT
PROGRAM**



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction provides guidance for pest management programs at Air Force installations. It implements Air Force policy directive (AFPD) 32-10, *Installations and Facilities*, 27 March 1995, and Department of Defense Instruction (DODI) 4150.07, *DOD Pest Management Program*, 29 May 2008. Use this guidance in the United States and its territories in conjunction with applicable Federal, state, and local laws and regulations. For installations outside the United States and its territories, compliance requirements within the Overseas Environmental Baseline Guidance Document (OEBGD) or the Final Governing Standards (FGS) for the host country take precedence over this instruction. This publication applies to Air Force Reserve Command (AFRC) and Air National Guard (ANG) Units. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the AFRIMS (Air Force Records Information Management System) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. Users should send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through major commands (MAJCOM) and HQ AFCESA, 139 Barnes Drive, Suite 1, Tyndall AFB, FL 32403-5319, to HQ USAF/A7C, 1260 Air Force Pentagon, Washington, D.C. 20330-1260. Any organization may supplement this instruction. MAJCOMs, FOAs and DRUs must send one copy of each supplement to HQ AFCESA/CEO; other commands send one copy of each supplement to the next higher headquarters.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. This revision updates, clarifies, and streamlines previous guidance on pest management; further emphasizes use of integrated pest management (IPM) programs to prevent or control pest and disease vectors; and adds new guidance on managing invasive species, using pesticides near threatened/endangered species habitats, pesticide security and reporting, contracts, and use of pesticides during contingency operations. This revision identifies civil engineer squadron commander and/or installation civil engineer responsibilities. It also implements changes due to DODI 4150.07, *DOD Pest Management Program*, 29 May 2008.

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1. Background. Air Force pest management programs are essential to prevent pest and disease vectors from adversely affecting military operations in peacetime and during contingency operations. Safe, effective, and environmentally sound IPM programs reduce pollution and other risk factors associated with pesticide use.

2. Objectives. The objectives of the Air Force pest management programs are to meet or exceed DOD pest management Measures of Merit (MoM), and promote and support the following:

- 2.1. Military readiness.
- 2.2. Installation program planning and maintenance.
- 2.3. Pollution prevention, conservation of natural/cultural resources, and environmental compliance.
- 2.4. Integrated pest management (IPM).

3. Responsibilities.

3.1. The Office of the Civil Engineer, Headquarters United States Air Force (HQ USAF/A7C). Approve Air Force pest management policy. The National Guard Bureau/Civil Engineer (NGB/A7) approves Air National Guard (ANG) policy.

3.2. Headquarters Air Force Civil Engineer Support Agency (HQ AFCESA). Provide a pest management subject matter expert (SME) who acts as the Air Force senior pest management consultant and whose responsibilities are as follows:

- 3.2.1. Set standards, develop procedures, and provide technical assistance to implement Air Force policy and programs for in-service and contract pest management operations.
- 3.2.2. Coordinate with engineering and medical operations to ensure the Air Force has adequate combat pest management capability.
- 3.2.3. Ensure all MAJCOM pest management consultants (PMC) are currently certified in the appropriate DOD pest management categories.
- 3.2.4. Establish the Air Force self-help pest management program.
- 3.2.5. Coordinate with Headquarters Air Force Medical Support Agency (HQ AFMSA) Public Health Division (SG3PM) and Bioenvironmental Engineering Division (SG3PB) on aspects of the pest management program that present potential occupational and environmental health hazards. **Note:** ANG/A7AN provides comparable services for ANG installations.
- 3.2.6. Coordinate with DOD and Air Force for the development and maintenance of a computerized integrated pest management information system (IPMIS).
- 3.2.7. Forward contingency pest management records to the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) in accordance with DODI 6490.03, *Deployment Health*, for archiving in the Defense Occupational and Environmental Health Readiness System (DOEHRS).
- 3.2.8. Represent the Air Force Civil Engineer as a voting council member on the Armed Forces Pest Management Board (AFPMB) (<http://www.afpmb.org>).
- 3.2.9. Collect MAJCOM pest management data and analyze for Air Force-wide issues; consolidate and validate Air Force data for the DOD Pest Management (PM) MoM submittal; and forward through A7C to the AFPMB.

3.3. MAJCOM (through MAJCOM Pest Management Consultant [PMC]).

- 3.3.1. Implement pest management policies and programs for their installations.
- 3.3.2. Use the MAJCOM Environmental Safety Occupational Health Compliance Assessment and Management Program (ESOHCAMP) Pesticide Management Checklist and applicable sections of AFPMB Technical Guide (TG) No. 18, *Installation Pest Management Program Guide*, to assess the effectiveness of installation pest management programs; review installation pest management programs on-site at least every 36 months, and annually review installation pest management plans for adherence to DOD and Air Force policy.
- 3.3.3. Identify personnel needing pesticide applicator certification or recertification during the annual training survey.
- 3.3.4. Certify only military and DOD civilian pest management personnel who have met the training requirements (in-residence training, correspondence course, and on-the-job training) for pesticide applicator certification as specified in the AFPMB document, DOD 4150.07-M, Volume 1, *DOD Plan for the Certification of Pesticide Applicators*. (Provide all certified pest management personnel with DD Form 1826, *Certificate of Competency*, and DD Form 1826-1, *Pesticide Applicator Card*. Pesticide applicator certification is valid for three years from the date graduated from one of the following training classes:

Pest Management Apprentice, Pest Management Pesticide Applicator Recertification Training, or Pest Management Certification Training, unless revoked for cause.)

3.3.5. Review and approve installation pest management plans, pesticide requests, contract performance work statements, aerial spray projects, and facility design and/or upgrades.

3.3.6. Programs adequate resources to ensure program reviews, training, and compliance requirements are met.

3.3.7. Help installations implement the IPMIS computerized pesticide database, and annually forward the consolidated pest management data to HQ AFCESA/CEOA.

3.3.8. Consolidate base DOD PM MoM and Air Force Scorecard submittals, analyze for MAJCOM-wide issues, validate, and forward to HQ AFCESA/CEOA.

3.4. Air Force Installation Engineer/Civil Engineer Squadron Commander.

3.4.1. Provide oversight and support of all installation pest management programs in accordance with DOD, Federal, state, and legally applicable host nation laws.

3.4.2. Provide facilities, equipment, and pesticides in accordance with DODI 4150.07.

3.4.3. Provide the appropriate number of certified pest management personnel according to DODI 4150.07 and Air Force manpower standards to support contingency and installation requirements.

3.4.4. Provide financial resources for operations and training to meet installation and contingency pest management requirements.

3.4.5. Select (in writing) an installation pest management coordinator (IPMC) to oversee the development of installation pest management plans, collect and report data on all installation pesticide use, review contract specifications, and serve as the primary point of contact (POC) for all installation pesticide compliance.

3.4.6. Review and approve installation pest management plans and contracts.

3.4.7. Provide pest management support for installation facilities, grounds, airfield Bird/Wildlife Air Strike Hazard (BASH) mitigation measures, range operations, golf course maintenance (in accordance with AFI 65-106, *Appropriated Fund Support of Morale, Welfare, and Recreation [MWR] and Non-appropriated Fund Instrumentalities [NAFIS]*), recreation areas, etc.

3.5. Air Force Installation Pest Management Supervisor/Coordinator. The Air Force installation pest management supervisor/coordinator works in the civil engineering (CE) career field and is responsible for the installation's pest management program and performs the functions of the installation pest management coordinator as specified in DODI 4150.07.

3.5.1. Overall Responsibilities.

3.5.1.1. Work closely with other CE, services, medical personnel, and the MAJCOM PMC to produce an effective pest management program.

3.5.1.2. With assistance from the installation environmental office, coordinate with Federal, state, installation, local or host nation pest management, environmental, and wildlife personnel as necessary.

3.5.2. Regulatory Compliance.

3.5.2.1. Ensure pest management programs and facilities comply with all applicable Federal, state, and local laws, DOD instructions, and Air Force requirements; follow guidance in AFPMB TG No. 17, *Design of Pest Management Facilities*, for designing new facilities and renovating existing facilities; consult with bioenvironmental engineering personnel regarding the adequacy of the pest management facility to ensure it provides a safe work environment for pest management personnel.

3.5.2.2. Use pesticides approved in writing by the MAJCOM PMC in accordance with Environmental Protection Agency (EPA) label requirements.

3.5.2.3. Review the most recent ESOHCAMP Pesticide Management Checklists for guidance.

3.5.2.4. For overseas installations outside U.S. jurisdiction, apply the FGS as developed under DOD 4715.5G, *Overseas Environmental Baseline Guidance Pesticide Management Checklist*, for the host country; ensure host nation personnel receive non-FIFRA training in accordance with DODI 4150.07 and the FGS.

3.5.2.5. Follow guidance in AFI 32-1074, *Aerial Application of Pesticides*, for aerial application of pesticides.

3.5.3. Personnel Management.

3.5.3.1. Ensure only certified personnel (or uncertified but trained personnel that are under direct supervision of a certified applicator) apply pesticides according to guidance in DOD 4150.07-M, Vol. 1.

3.5.3.2. Oversee the training and pesticide applicator certification of peacetime and wartime pest management personnel (DOD and non-appropriated funded) according to the AFPMB document, DOD 4150.07-M, Vol. 1.

3.5.3.3. Schedule DOD pest management certification and recertification through the unit training manager from courses listed on the DOD Pest Management Training and Certification website (<http://www.afpmb.org/pubs/courses/courses.htm>); pesticide applicator recertification should be scheduled not later than six months prior to expiration.

3.5.3.4. Send requests for pesticide applicator certification or recertification, based on successful completion of training, to the MAJCOM PMC. **Note:** The losing MAJCOM will recertify permanent-change-of-station personnel before their departure if the pesticide applicator certification expires within, before, or after six months of their departure date.

3.5.3.5. Prisoners or volunteer workers may not be assigned to apply pesticides.

3.5.3.6. After receiving training from pest management personnel, non-pest management personnel may apply pesticides in the following situations:

3.5.3.6.1. Adult military housing occupants (non-privatized), facility building managers, and others specified within an approved installation IPM plan may apply approved self-help pesticides in accordance with the Air Force Self-Help Pest Management Program for Military Housing Occupants and Building Managers.

3.5.3.6.2. Military personnel may apply approved arthropod repellents (including individual dynamic absorption kits) for personnel protection and for use on uniforms, tents, and mosquito netting. Civilian personnel working outdoors may only apply repellents labeled for civilian use by the EPA to skin or clothing.

3.5.3.6.3. Military personnel may apply approved aerosol insecticide for quarantine insect extermination on aircraft after receiving training from the CE pest management section.

3.5.4. Preventing the Spread of Pests.

3.5.4.1. Take measures to prevent the movement of pests and disease vectors requiring quarantine in accordance with Air Force joint instruction (AFJI) 48-104, *Quarantine Regulations of the Armed Forces*.

3.5.4.2. Work with customs inspectors and loadmasters to ensure cargo is pest-free. **Note:** U.S. Department of Agriculture and U.S. Customs personnel provide critical assistance on retrograde pest-prevention procedures.

3.5.4.3. Disinfect aircraft using guidance in DOD Foreign Clearance Guides when directed by the aircraft commander.

3.5.4.4. Coordinate with local, state, and Federal agencies on cooperative agreements for managing invasive and noxious species on Air Force land in accordance with AFI 32-7064, *Integrated Natural Resources Management*, when state or private land in the same area has such programs.

3.5.5. Installation Pest Management Plan.

3.5.5.1. Make annual plan updates to the current list of certified applicators (DOD and state), pesticide inventory, and new standard operating procedures.

3.5.5.2. Make sure the plan addresses annual requirements, such as labor and integrated pest management measures to be used against each pest.

3.5.5.3. Include necessary attachments such as pesticide labels, material safety data sheets (MSDS), golf course integrated pest management plans, and agreements between appropriate state pesticide organizations and DOD. **Note:** Include any other unique pest management programs in this plan (e.g., BASH, invasive species management plans).

3.5.5.4. All pest management operations must be based on appropriate surveillance data. Vector surveillance data must be coordinated with public health, documented, and input into IPMIS.

3.5.5.5. If endangered species are present, coordinate the plan with the regional U.S. Fish and Wildlife Service office with the assistance of the installation natural

resources manager in accordance with AFI 32-7064. Overseas locations must comply with OEBGD and FGS for host nation wildlife protection.

3.5.5.6. In preparing this plan, follow format guidance in DODI 4150.07, Enclosure 5, or alternate direction from MAJCOMs. Ensure all activities such as ranges, radar sites, missile sites, recreation areas, and any other activities that employ pesticides are included in the plan.

3.5.5.7. This plan will be updated annually but is completely revised and formally staffed every five years with the following individuals:

3.5.5.7.1. Installation natural resources manager and/or pest management coordinator.

3.5.5.7.2. Installation environmental coordinator.

3.5.5.7.3. Public health officer.

3.5.5.7.4. Bioenvironmental engineer officer.

3.5.5.7.5. Installation civil engineer.

3.5.5.7.6. Mission support group commander.

3.5.5.7.7. Wing commander.

3.5.5.8. Provide an electronic copy of the plan to the MAJCOM for approval by the PMC.

3.5.6. Contingency Pest Management.

3.5.6.1. Use information in AFPMB TG No. 24, *Contingency Pest Management Pocket Guide*, to control disease vectors and pests during field situations worldwide. Civil engineer and operational unit commanders should be briefed by pest management and public health personnel to ensure adequate resources are allocated for protecting deployed personnel against disease vectors and pests.

3.5.6.2. Procure and use only pesticides listed in the DOD Contingency Pesticide List during contingency operations.

3.5.6.3. During emergency conditions, EPA-registered pesticides may be locally procured with the proper approval (in writing) from a pest management professional (PMP) designated by the task force surgeon. Requests for non-EPA registered pesticides must follow guidance on the AFPMB Contingency website (<http://www.afpmb.org/coweb/coweb.htm>).

3.5.6.4. Store contingency pesticides under the same controlled temperature, security, and other conditions as daily use pesticides.

3.5.6.5. Rotate contingency pesticide stocks back to pest management shop inventories and replace them with fresh chemicals as needed.

3.5.6.6. Use pest management contracts when cost effective or when advantageous for non-routine, large-scale, or emergency services, especially when specialized equipment or expertise is needed. Pest management consultants shall review and technically approve contract documents for pest management operations, including

augmentation contracts, to ensure they comply with status of forces agreements (SOFA), FGS, and OEBGD.

3.5.6.7. The contracting officer shall ensure that quality assurance evaluators (QAE) who inspect the performance of contractor-provided pest management services are DOD-trained in pest management or hold DOD pest management certification.

3.5.6.8. Work with public health personnel to ensure that all deploying CE and other Air Force personnel have and are trained to use insect repellents and permethrin-treated clothing for protection against disease vectors and pests likely to be encountered.

3.5.6.9. Coordinate with the medical intelligence officer to assess the health risks from disease vectors and other medically important pests.

3.5.6.10. Remove feral or wild animals in accordance with AFJI 48-131. Responsibilities of pest management, security forces, and veterinary or public health personnel should be clearly outlined in the installation pest management plan. BASH management must be coordinated with flight safety and airfield operations.

3.5.6.11. Removal and disposal of dead animals is the responsibility of pest management unless contracted out. Personnel that handle dead or dying animals must wear proper personal protective equipment for handling and disposing of the carcasses.

3.5.6.12. Report contingency pesticide use and pest surveillance through appropriate command channels or AOR PMC to HQ AFCESA/CEOA. Records will be forwarded to USACHPPM for archiving in DOEHRs.

3.5.7. Destructive Pests.

3.5.7.1. The installation pest management supervisor or QAE monitor shall report all property damage caused by pests, including to stored products, golf course, and forestry, so information can be recorded in the IPMIS.

3.5.7.2. Include termite inspection frequency in installation pest management plans.

3.5.8. Facility Maintenance and New Construction.

3.5.8.1. Operate a self-help pest management program for non-privatized military housing occupants when cost effective and when IPM monitoring indicates the need for a self-help program, following guidance from HQ AFCESA/CEOA.

3.5.8.2. Work with facility managers and occupants of buildings other than military family housing to control minor pests through good housekeeping (see paragraph 4.3) and self-help pest management products.

3.5.8.3. Work with other CE shops on facility maintenance and repair for control of pests.

3.5.8.4. Work with CE and other design agencies to ensure termite treatments are included in new construction and major renovation projects. When needed, use only non-repellent termiticides in accordance with Unified Facilities Guide Specification

(UFGS) 31 31 16, *Soil Treatment for Subterranean Termite Control*, applied at the highest EPA-labeled concentration and application rate.

3.5.8.5. Coordinate on all new construction and major renovation projects to ensure pest management problems are not built into facilities.

3.5.9. Protecting Personnel Health.

3.5.9.1. Ensure all personnel new to the career field receive a baseline physical exam before potential occupational exposure to pesticides, proper immunizations, and periodic occupational physical exams as directed by the occupational and environmental working group.

3.5.9.2. Protect the health and safety of pest management personnel through training (including initial and periodic occupational health and hazard communication [HAZCOM] training), emphasis on good work habits (such as using protective clothing and equipment), and construction that reduces or eliminates hazards. Assure that pregnant and breastfeeding pest management personnel have been referred to public health.

3.5.9.3. Provide protective clothing and equipment to all pest management personnel who mix and apply pesticides (see paragraph 4.4).

3.5.9.4. Notify public health before applying pesticides in food preparation and consumption facilities, medical facilities, and child development centers.

3.5.10. Coordinate with the bioenvironmental engineer by accomplishing the following:

3.5.10.1. Enroll all pesticide applicators into the respiratory protection program.

3.5.10.2. Ensure that bioenvironmental engineering receives:

3.5.10.2.1. A hard copy of installation pesticide inventories.

3.5.10.2.2. Pertinent MSDSs.

3.5.11. Environmental Protection.

3.5.11.1. Use recyclable and refillable pesticide containers and closed pesticide mixing and transfer systems as much as possible.

3.5.11.2. Do not inject insecticides into the soil to control subterranean termites in any military buildings with sub-slab or in-slab heating, ventilation, or air-conditioning ducts, unless permanent blocks are made to the ducts.

3.5.11.3. Manage pesticide rinsates in accordance with *EPA Guidelines for Responsible Pesticide Use* (http://www.epa.sa.gov.au/pdfs/guide_pesticides.pdf).

3.5.12. Safety.

3.5.12.1. Give the fire department a hardcopy of pest management, self-help, and golf course building location(s) and layout(s) indicating pesticide storage areas. Provide the fire department with a hardcopy of installation pesticide inventories and MSDSs annually.

3.5.12.2. Coordinate all fumigations with installation medical, fire, security forces, and safety personnel.

3.5.12.3. Do not use internal-combustion or electrical-power-driven spraying machines for aerosol or mist sprays inside buildings without approval from the bioenvironmental engineer and the installation fire chief.

3.5.12.4. Remove stray and feral animals in accordance with AFJI 48-131, AFI 32-7064, and AFPMB TG No. 37, *Guidelines for Reducing Feral/Stray Cat Populations on Military Installations in the United States*. Responsibilities of pest management, natural resources, security forces, and veterinary or public health personnel should be clearly outlined in the installation pest management plan. United States Department of Agriculture (USDA) Wildlife Services should be consulted on animal damage control and may be contracted to assist with management.

3.5.12.5. Stray animals should be captured and returned to their owner if possible. Feral animals must be transported to an approved humane shelter facility as specified by the base veterinarian. Pest management facilities must not be used as holding areas for animals.

3.5.12.6. Removal and disposal of dead animals is the responsibility of pest management unless contracted out. Personnel that handle dead or dying animals must wear proper personal protective equipment for handling and disposing of the carcasses.

3.5.12.7. Collection and disposal of dead animals will be tracked and reported to pest management, natural resources, and veterinary and public health personnel if dead animals harbor disease or parasites of medical importance to human or animal health. Public awareness of local disease presence must be coordinated with the installation public affairs office.

3.5.13. **Security.**

3.5.13.1. Comply with AFPMB TG No. 7, *Installation Pesticide Security*.

3.5.13.2. Coordinate with security forces when using firearms for pest management. Shotguns must be assigned by the logistics readiness squadron (LRS) for pest control.

3.5.13.2.1. Notify the security forces desk sergeant before engaging in pest management operations (including use of pellet rifles).

3.5.13.2.2. Wear blaze orange vest labeled "Pest Management" when carrying a firearm on base.

3.5.13.2.3. Procure authorized ammunition through approved DOD and Air Force supply methods in accordance with AFCAT 21-209, Volume 1, *Ground Munitions*.

3.5.13.2.4. Properly store firearms and ammunition in accordance with AFI 31-101, *The Air Force Installation Security Program*.

3.5.14. **Records.**

3.5.14.1. Obtain necessary computer hardware and use the IPMIS pesticide software to track pesticide inventories and pesticide applicator certifications.

- 3.5.14.2. Record daily pesticide use on the IPMIS pesticide software or on DD Form 1532, *Pest Management Report*, and DD Form 1532-1, *Pest Management Maintenance Record*, if IPMIS is not online.
- 3.5.14.3. Ensure that pesticide recordkeeping complies with state or host nation requirements.
- 3.5.14.4. Keep historical data on termite inspection and pesticide application in accordance with the records disposition schedule (RDS).
- 3.5.15. Monthly reports (sent not later than 10 days after close of month to the local public health office and MAJCOM PMC [or ANG/A7AN]) shall include:
 - 3.5.15.1. Pesticide inventory data.
 - 3.5.15.2. Pesticide applicator certification data.
 - 3.5.15.3. Pesticide application data (equivalent of Report Control Symbol [RCS]: DD-P&L [A&AR] 1080) for all pest management operations on Air Force real property:
 - 3.5.15.3.1. Pest management shop.
 - 3.5.15.3.2. Self-help pest management.
 - 3.5.15.3.3. Grounds maintenance.
 - 3.5.15.3.4. Golf course.
 - 3.5.15.3.5. Contractors that apply pesticides.
 - 3.5.15.3.6. Forestry.
 - 3.5.15.3.7. Leasee and land permit holders.
- 3.5.16. **Requesting Help from other Air Force Agencies.**
 - 3.5.16.1. Request assistance on airfield wildlife control problems, through the MAJCOM, from the BASH team at Headquarters Air Force Safety Center Flight Safety Wildlife <http://www.afsc.af.mil/organizations/bash/index.asp> (ANG personnel will request assistance from BASH personnel at ANG/A7AN). USDA Wildlife Services can also be contracted to assist with animal damage control.
 - 3.5.16.2. Request help from 757 Airlift Squadron/Director Operations Spray (AS/DOS) <http://www.youngstown.afrc.af.mil/units/aerialspraysquadron/index.asp> for aerial dispersal of pesticides when ground-based pest management measures fail, are not practical, or are not feasible from a safety viewpoint. Contact the 757 AS/DOS entomologist, Youngstown Air Reserve Station, Ohio, when planning aerial pesticide dispersal operations.
- 3.6. **Installation Natural Resources Manager/IPMC.**
 - 3.6.1. Provide program guidance for managing IPM programs in accordance with AFI 32-7064.
 - 3.6.2. Work with MAJCOM and installation pest management personnel to develop relevant sections of the integrated natural resources management plan (INRMP) including

invasive species, animal damage control, BASH, ecosystem management, forestry, and range and grounds maintenance.

3.6.3. Coordinate all required National Environmental Policy Act (NEPA) documentation for pest management activities.

3.6.4. Provide guidance for threatened and endangered species protection.

3.6.5. Coordinate the INRMP and installation pest management plan with the U.S. Fish and Wildlife Service in accordance with the Sikes Act.

3.7. Public Health Officer.

3.7.1. Determine the type, source, and prevalence of disease vectors and other medically important pests which affect the health and efficiency of personnel in accordance with AFI 48-102, *Medical Entomology Program*.

3.7.2. Coordinate with CE pest management personnel on preventive measures for pests and monitor the effectiveness of CE pest management efforts.

3.7.3. Report to CE pest management personnel the value of food lost to pests and total hours pests of possible medical importance were surveyed so data can be submitted to the MAJCOM PMC in the monthly IPMIS report.

3.7.4. With the occupational and environmental working group, determine the scope of occupational physicals, requirement for immunizations, and provide a roster for scheduling occupational physical examinations, including baseline exams before pesticide exposure, for all CE and golf course personnel who apply pesticides.

3.7.5. Provide consultation on training and technical matters to pest management supervisors on the HAZCOM program. Supervisors will provide HAZCOM training to other pest management personnel.

3.8. Bioenvironmental Engineer.

3.8.1. Evaluate potential occupational exposures and the adequacy of exposure control through periodic shop visits.

3.8.2. Set local standards for obtaining and using personal protective equipment for pest management personnel.

3.8.3. Conduct respirator training and respirator fit testing of pest management personnel.

3.8.4. At the direction of the medical treatment facility commander, make sure medical treatment facilities personnel neither store nor use EPA-classified pesticides, with the exception of disinfectants and germicides; and insect repellents and permethrin-treated clothing for protecting deployed personnel against insect vectors.

3.9. Golf Course Manager and/or Superintendent.

3.9.1. Follow guidance in this instruction, AFI 32-7064, and DODI 4150.07.

3.9.2. Develop a golf course IPM plan for inclusion in the installation pest management plan.

3.9.3. Consult with the installation pest management supervisor and the MAJCOM PMC on pest management issues.

3.9.4. Request nonstandard pesticides for golf courses through the installation pest management coordinator and receive approval from the MAJCOM PMC before ordering or using nonstandard, locally purchased pesticides. **Note:** This requirement applies to use of government purchase cards (GPC) and all other forms of procurement.

3.9.5. The MAJCOM may waive DOD certification requirements for golf course personnel in CONUS (in accordance with DODI 4150.07) if the applicator is state certified in appropriate EPA categories. State certification must be maintained in accordance with state pesticide certification requirements.

3.10. Base Exchange Manager.

3.10.1. Maintain current pesticide inventory.

3.10.2. Only market pesticides with current EPA, state, and/or host nation registration.

3.10.3. Follow guidance in AFPMB TG No. 45, *Storage and Display of Retail Pesticides*, and AFPMB TG No. 15, *Pesticide Spill Prevention and Management*.

3.10.4. Coordinate all pesticide disposals with the installation pest management supervisor and follow that individual's guidance.

3.10.5. Make hardcopy MSDSs available for review by employees, the bioenvironmental engineer, and the fire department.

3.11. Defense Commissary Agency Manager.

3.11.1. Maintain current pesticide inventory.

3.11.2. Only market pesticides with current EPA, state, and/or host nation registration.

3.11.3. Follow guidance in AFPMB TG No. 45 and AFPMB TG No. 15.

3.11.4. Coordinate all pesticide disposals with the installation pest management supervisor and follows that individual's guidance.

3.11.5. Make hardcopy MSDSs available for review by employees, the bioenvironmental engineer, and the fire department.

4. Procedures.

4.1. Cooperating with Civilian Pest Management Projects.

4.1.1. When the Air Force and a civilian community have a common pest management problem, Air Force involvement should be proportionate to the military interest.

4.1.2. When pest management work, including aerial spray, is solely for the benefit of persons, communities, states, or other Federal agencies in the United States, a request from the appropriate Federal agency must go through DOD channels.

4.1.3. In overseas areas, give comparable assistance upon a request by the appropriate host nation authorities. Obtain Department of State approval per DOD Directive (DODD) 5100.46, *Foreign Disaster Relief*.

4.2. Identifying Pests.

4.2.1. If you need to identify insects, ticks, rodents, and other pests, contact one of the units listed in AFI 48-102 or another appropriate DOD or civilian agency.

4.2.2. In the United States, send specimens to USAFSAM/PHR (Attn: Entomology), 2513 Kennedy Circle, Brooks City-Base, TX 78235-5116.

4.2.3. Pacific Air Forces (PACAF) installations submit specimens to Det 3, USAF School of Aerospace Medicine (USAFSAM), Unit 5213, Box 10, Kadena AB, Japan (Okinawa), APO AP 96368-5213.

4.2.4. European (USAFE) installations submit specimens to HQ USAFE/A7AVQ, Unit 3050, Box 10, APO AE 09094-5010.

4.3. Good Housekeeping Practices for Housing (Non-Privatized) and Facility Managers. The installation pest management supervisor, facility managers, and building occupants cooperate on integrated pest management practices to keep pests under control without using pesticides. Such practices include:

4.3.1. Inspecting buildings.

4.3.2. Implementing proper sanitation.

4.3.3. Eliminating pest harborage.

4.3.4. Excluding pests.

4.3.5. Storing food properly.

4.3.6. Performing minor building maintenance.

4.3.7. Cooperating in scheduling work.

4.3.8. Arranging and protecting building contents before pest management jobs start.

4.3.9. Rearranging furnishings after pest management operations.

4.4. Protective Clothing. Protective clothing and equipment for personnel who mix and apply pesticide may include coveralls, respirators, goggles, or chemical- and oil-resistant rubber gloves, rubber boots, safety shoes, and special fumigation safety equipment. Use of protective equipment and the level of protection should comply with at least the minimum stated on the pesticide label.

4.4.1. Keep coveralls clean at all times. To prevent pesticide contamination of other clothing, use shop washing machines and dryers or clearly identify any clothing sent to base laundry services. Contaminated work clothing should never be taken home or cleaned in washing machines with other clothing.

4.4.2. Properly dispose of any clothing that is heavily contaminated by pesticides.

4.4.3. Pest management supervisors will keep the current copy of Air Force Office of Safety and Health Standard (AFOSH STD) 48-137, *Respiratory Protection Program*, in the shop and should be familiar with its contents.

4.5. Procuring and Disposing of Pesticides.

4.5.1. All installation pest management personnel shall obtain pesticides and equipment through Air Force supply channels, except as provided by service contracts.

- 4.5.1.1. Order standard pesticide application equipment from Federal supply catalogues.
 - 4.5.1.2. Procure pesticides from AFPMB Standard Pesticides List or non-stock listed products that are approved by the MAJCOM PMC (or ANG/A7AN) and used in accordance with the pest management plan.
 - 4.5.1.3. Request and receive approval from the MAJCOM PMC before ordering or using nonstandard, locally purchased pesticides or application equipment. **Note:** This requirement applies to use of GPCs and all other forms of procurement.
 - 4.5.2. To ensure no one buys or issues non-approved pesticides, use advice code 2B on the ordering documents to inform supply personnel that another product may not be substituted for the requested item.
 - 4.5.3. Pesticide applicators shall use all pesticides in accordance with EPA label directions. Reference EPA Endangered Species Protection Bulletins <http://epa.gov/espp/bulletins.htm> for geographically specific pesticide use limitations for the protection of endangered or threatened species and their designated critical habitat prior to purchase and use of pesticides.
 - 4.5.4. The pest management supervisor, in coordination with the base environmental coordinator, will dispose of all pesticides or pesticide containers that have deteriorated or cannot be returned to depot stocks. The Defense Reutilization and Marketing Service will process excess stocks of pesticides for turn-in and disposal according to current environmental policy guidance.
- 4.6. Managing Pest Management Vehicles and Equipment.**
- 4.6.1. Only pest management personnel may use pest management vehicles. Use equipment according to the manufacturer's instructions.
 - 4.6.2. Equip vehicles with locking compartments to ensure the safe handling, storage, and transport of pesticides and other chemicals; a telephone maintenance truck (NSN 2320-00-541-1714) will suit the purpose. Low-speed vehicles used for pesticide application should be properly equipped for safety and operated in accordance with the manufacturer's specifications.
 - 4.6.3. Make sure that all prime movers used for fogging, misting, dusting, and ultra-low-volume application have enclosed cabs and internal recycling air-conditioners to protect the operator from excessive pesticide exposure. The appropriate level of respiratory protection and other personal protection equipment will be provided to the driver (in addition to rolling up the windows).
 - 4.6.4. The truck must carry emergency phone numbers in case of spills or chemical exposures and carry a spill cleanup kit capable of containing 110 percent of the largest pesticide volume on the vehicle. Pest management personnel must carry radios or portable phones in vehicles.
 - 4.6.5. Attach placards to vehicle- or trailer-mounted sprayers identifying the product name (brand name from product label) preceded by the word "Diluted" or "End-Use Concentrate"; EPA registration number from concentrate product label; name of active

ingredient(s) and percentage(s) of end-use dilution; and appropriate signal word, i.e., Poison, Danger, Warning, Caution (from product label).

4.6.6. Keep all pesticide dispersal equipment in the CE pest management section.

Exception: Equipment at base golf courses that have certified pesticide applicators.

4.7. Contracting for Pest Management Services.

4.7.1. Use pest management contracts when more cost effective than in-house services. All pest management contractors must use IPM identified in the installation pest management plan and comply with the pesticide applicator certification, licensing, and registration requirements of the state or country where the work is performed.

4.7.2. The MAJCOM PMC (or ANG/A7AN) will review and approve all performance work statements. Installation personnel must receive MAJCOM PMC approval before a request (including GPCs and AF IMT 9, *Request for Purchase*) is made for procuring commercial pest management service (including base operations support [BOS], General Services Administration [GSA], subcontracts, or other support service contracts that utilize pesticides).

4.7.3. The CE contract management office will work with the installation contracting office to ensure all prospective contractors send proof that all their personnel have current state pesticide applicator certifications <http://aec.army.mil/usaec/pest/certificates00.html> for the types of operations specified in the contract statement of work prior to starting work.

4.7.4. The prospective contractor must operate in compliance with all state and local regulations. All pest management contractors must also comply with sections of DODI 4150.07 and contents of this instruction that apply to contract pest management operations. Only state-certified contract pesticide applicators may mix or apply pesticides on CONUS Air Force installations. For overseas installations outside U.S. jurisdiction, follow the country FGS or OBEGD for pest management contract requirements or MAJCOM policy.

4.7.5. The contracting officer and IPMC must approve the location where pesticides are mixed and/or stored prior to starting work. This site should have secondary containment and backflow prevention as identified in AFPMB TG No. 17. The contractor will ensure this area is properly managed to prevent spills.

4.7.6. The contractor must comply with all applicable parts of Title 29, Code of Federal Regulations (CFR), *Occupational Safety and Health Standards*, Part 1910; Title 29, CFR, *Safety and Health Standards for Federal Service Contracts*, Part 1925; Title 40, CFR, Parts 150-189, and Title 49, CFR, *Hazardous Materials Regulations*, Part 171, while on an Air Force installation, to ensure safe working conditions for contract personnel and a safe environment for the occupants of Air Force facilities.

4.7.7. Certified pest management shop personnel will help the QAE evaluate pest management contracts.

4.7.7.1. QAEs themselves must receive training in pest management according to guidance in DODI 4150.07. If an installation's total pest management contract efforts

are less than 0.25 work year annually, the presence of a trained QAE at the installation is not mandatory.

4.7.7.2. The contractor will furnish the QAE with labels and MSDSs for all contract pesticide materials 25 days prior to the start of the contract. The QAE will submit labels and MSDSs to the MAJCOM PMC for approval at least 15 days prior to the start of the contract. Any request during the contract period to use unapproved pesticides will be forwarded to the MAJCOM PMC for approval prior to use.

4.7.7.3. The contractor must provide data on daily pesticide use for input into the IPMIS pesticide management database. The contractor, QAE, or other CE representative will input data into IPMIS and forward it monthly (by 10 days after the close of the month) to the MAJCOM PMC, as specified in the contract.

4.7.7.4. The QAE or other CE representative must maintain historical pesticide data according to the RDS.

5. Technical Publications and Pest Management Websites.

5.1. **Publications.** Every pest management shop should have the following publications:

5.1.1. AFI 32-1074, *Aerial Application of Pesticides*

5.1.2. AFI 32-7064, *Integrated Natural Resources Management*.

5.1.3. AFI 48-102, *Medical Entomology Program*.

5.1.4. Armed Forces Pest Management Board publications:

<http://www.afpmb.org/publications.htm>

5.1.5. UFGS 31 31 16, *Soil Treatment for Subterranean Termite Control*:

<http://www.wbdg.org/ccb/DOD/UFGS/UFGS%2031%2031%2016.pdf>

5.1.6. Pest management trade journals.

5.1.7. State agricultural extension service pest management literature.

5.1.8. Pest management textbooks.

5.2. **Websites.** All Air Force pest management shops should have access to the following websites:

5.2.1. AFCESA Pest Management Program: <https://www.my.af.mil/gcss-af/USAF/ep/contentView.do?contentType=EDITORIAL&contentId=1299949&channelPageId=-336217&parentCategoryId=-1900281&programId=1242492>

5.2.2. 3E4X3 Communities of Practice (CoP):

<https://wwwd.my.af.mil/afknprod/ASPs/CoP/EntryCoP.asp?Filter=OO-EN-CE-46>

5.2.3. Internet Center for Wildlife Damage Management: <http://icwdm.org>

5.2.4. Integrated Pest Management Information System (IPMIS):

<http://www.envirosoftinc.com/ipmis.html>

5.2.5. DOD Forms:

<http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm>

5.3. **Sources.** Contact your MAJCOM PMC or HQ AFCESA/CEOA for additional guidance. **Note:** ANG personnel should contact ANG/A7AN for additional guidance.

6. Prescribed and Adopted Forms.

6.1. Prescribed Forms.

None.

6.2. Adopted Forms.

AF Form 9, *Request for Purchase*

AF Form 847, *Recommendation for Change of Publication*

DD Form 1532, *Pest Management Report*

DD Form 1532-1, *Pest Management Maintenance Record*

DD Form 1826, *Certificate of Competency*

DD Form 1826-1, *Pesticide Applicator Card*

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DCS/Installations, Logistics & Mission Support

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

7 USC 136 et seq., *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*, as amended

7 USC 2801, *Federal Noxious Weed Act of 1976*

7 USC 426–426b, *Animal Damage Control Act*

16 USC 670, *Sikes Act*

16 USC 1531–1543, *Endangered Species Act of 1973*, as amended

29 CFR Part 1910, *Occupational Safety and Health Standards*

29 CFR Part 1925, *Safety and Health Standards for Federal Service Contracts*

40 CFR Parts 150–189, *Environmental Protection Agency*

49 CFR Part 171, *Hazardous Materials Regulations*

E.O. 13112, *Invasive Species*, February 3, 1999

AFCAT 21-209V1, *Ground Munitions*, 9 November 2007

AFI 31-101, *The Air Force Installation Security Program*, 1 March 2003

AFI 32-1074, *Aerial Application of Pesticides*, 1 May 1998

AFI 32-7045, *Environmental Compliance Assessment and Management Program (ECAMP)*, 1 July 1998

AFI 32-7064, *Integrated Natural Resources Management*, 17 September 2004

AFI 48-102, *Medical Entomology Program*, 1 July 2004

AFI 65-106, *Appropriated Fund Support of Morale, Welfare, and Recreation (MWR) and Non-appropriated Fund Instrumentalities (NAFIS)*, 6 May 2009

AFI 91-202, *The US Air Force Mishap Prevention Program*, 1 August 1998

AFJI 48-104, *Quarantine Regulations of the Armed Forces*, 24 January 1992

AFJI 48-131, *Veterinary Health Services*, 29 August 2006

AFMAN 33-363, *Management of Records*, 1 March 2008

AFOSH STD 48-137, *Respiratory Protection Program*, 10 February 2005

AFPAM 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques*, 1 February 2004

AFPD 32-10, *Installations and Facilities*, 27 March 1995

AFPMB Standard Pesticides List

AFPMB TG No. 7, *Installation Pesticide Security*, August 2003

AFPMB TG No. 15, *Pesticide Spill Prevention and Management*, June 1992

AFPMB TG No. 17, *Design of Pest Management Facilities*, 1 November 1991

AFPMB TG No. 18, *Installation Pest Management Program Guide*, March 2003

AFPMB TG No. 24, *Contingency Pest Management Pocket Guide*, May 2008

AFPMB TG No. 37, *Guidelines for Reducing Feral/Stray Cat Populations on Military Installations in the United States*, January 1996

AFPMB TG No. 45, *Storage and Display of Retail Pesticides*, November 2006

DOD 4150.7-M, *DOD Pest Management Training and Certification* 24 April 1997

DOD 4150.07-M-V1, *DOD Plan for the Certification of Pesticide Applicators*, 12 December 2008

DOD 4715.05-G, *Overseas Environmental Baseline Guidance Document*, 1 May 2007

DODD 5100.46, *Foreign Disaster Relief*, 4 December 1975

DODI 4150.07, *DOD Pest Management Program*, 29 May 2008

DODI 6490.03, *Deployment Health*, 11 August 2006

EPA Endangered Species Protection Bulletins

EPA Guidelines for Responsible Pesticide Use, December 2005

UFGS 31 31 16, *Soil Treatment for Subterranean Termite Control*

Abbreviations and Acronyms

AF—Air Force

AFCAT—Air Force Catalog

AFI—Air Force Instruction

AFJI—Air Force Joint Instruction

AFMAN—Air Force Manual

AFOSH—Air Force Occupational Safety and Health

AFPAM—Air Force Pamphlet

AFPD—Air Force Policy Directive

AFPMB—Armed Forces Pest Management Board

ANG/A7AN—Air National Guard Civil Engineer Environmental Planning Division

ANG—Air National Guard

AOR—Area of Responsibility

AS/DOS—Airlift Squadron/Director Operations Spray

BASH—Bird/Wildlife Aircraft Strike Hazard

BOS—Base Operations Support

CE—Civil Engineering

CFR—Code of Federal Regulations

CONUS—Continental United States

CoP—Community of Practice

Det 3 HSC/OEA—Detachment 3 Human Systems Center Analytical Division

DODD—Department of Defense Directive

DOD—Department of Defense

DODI—Department of Defense Instruction

DOEHRS—Defense Occupational and Environmental Health Reporting System

DRU—Direct Reporting Unit

E.O.—Executive Order

EA—Environmental Assessment

ECAMP—Environmental Compliance Assessment and Management Program

EPA—Environmental Protection Agency

ESOH CAMP—Environmental, Safety, and Occupational Health Compliance Assessment Management Program

FGS—Final Governing Standards

FIFRA—Federal Insecticide, Fungicide, and Rodenticide Act

FOA—Field Operating Activity

GPC—Government Wide Purchase Card

GSA—General Services Administration

HAZCOM—Hazard Communication

HQ AFCEE—Air Force Center for Engineering and the Environment

HQ AFCESA—Air Force Civil Engineering Support Agency

HQ AFMSA/SG3PB—The Air Force Medical Support Agency Bioenvironmental Engineering Division

HQ AFMSA/SG3PM—The Air Force Medical Support Agency Public Health Division

HQ AFSC/SEFW—Headquarters Air Force Safety Center, Flight Safety, Wildlife

HQ USAF/A7C—The Office of the Civil Engineer, Headquarters United States Air Force

HQ USAFE/A7AVQ—Headquarters United States Air Forces Europe/Environmental Branch

HQ USAF—Headquarters United States Air Force

IMT—Information Management Tool

INRMP—Integrated Natural Resources Management Plan

IPMC—Installation Pest Management Coordinator

IPM—Integrated Pest Management
IPMIS—Integrated Pest Management Information System
LRS—Logistics Readiness Squadron
MAJCOM—Major Command
MoM—Measures of Merit
MSDS—Material Safety Data Sheet
NEPA—National Environmental Policy Act
NGB/A7—National Guard Bureau/Civil Engineer
NSN—National Stock Number
O&M—Operations and Maintenance
OCONUS—Outside Continental United States
OEBGD—Oversees Environmental Baseline Guidance Document
PACAF—Pacific Air Forces
PDO—Publication Distribution Office
PMC—Pest Management Consultant
PM—Pest Management
PMP—Pest Management Professional
QAE—Quality Assurance Evaluator
RDS—Records Disposition Schedule
SG—Surgeon General
SOFA—Status of Forces Agreement
TG—Technical Guide
UFGS—Unified Facilities Guide Specification
USACHPPM—United States Army Center for Health Promotion and Preventive Medicine

Terms

Armed Forces Pest Management Board (AFPMB)—A Directorate of the Office of the Deputy Under Secretary of Defense (Acquisition, Technology and Logistics), the AFPMB recommends DOD policy, provides scientific advice, and enhances coordination among DOD components on all matters related to pest management.

Direct Supervision—Supervision that includes being at the specific location where pest management work is conducted; providing instruction and control; and maintaining a line-of-sight view of the work performed. Certain circumstances may temporarily remove the line-of-sight view of the application of pesticide from the supervisor, such as topographic constraints, vegetation constraints, or building structural constraints. Under these temporary circumstances, the supervisor shall be responsible for the actions of the pesticide applicator.

Disease Vector—Any animal capable of transmitting the causative agent of a human disease; serving as an intermediate or reservoir host of a pathogenic organism; or producing human discomfort or injury, including (but not limited to) mosquitoes, flies, other insects, ticks, mites, snails, and rodents.

Installation Pest Management Coordinator (IPMC)—Installation pest management supervisor or natural resources manager for the installation that is designated by the installation civil engineer (in accordance with MAJCOM guidance) to serve as the IPMC with responsibility for developing and updating the installation pest management plan. The IPMC will also review installation pest management contracts and the monthly pesticide use (active ingredient) reports submitted to the MAJCOM PMC. Pesticide chemical requests will be provided to the IPMC for review to ensure compliance with hazardous materials management.

Integrated Natural Resources Management Plan (INRMP)—A plan based on ecosystem management that describes and delineates the interrelationships of the individual natural resources elements in concert with the mission and land use activities affecting the basic land management plans; defines the natural resources elements and the activities required to implement stated goals and objectives for those resources.

Integrated Pest Management (IPM)—A planned program incorporating continuous monitoring, education, record keeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, materiel, or the environment. IPM includes methods such as habitat modification, biological control, genetic control, cultural methods, mechanical control, physical control, regulatory control, and the judicious use of least-hazardous pesticides.

Invasive Species—An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health (E.O. 13112).

Noxious Weed—Any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, natural resources, the public health, or the environment.

Nuisance Wildlife—Wildlife that damages property, impedes installation operations, or endangers public health and safety to the point where control measures are required. This category excludes wildlife species protected by the Endangered Species Act or Migratory Bird Treaty Act. All wildlife control efforts should be conducted in accordance with AFI 32-7064 and appropriate regulatory authorities.

Pests—Arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds, or other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

Pest Management Consultant (PMC)—Professional DOD pest management personnel located at component headquarters, field operating agencies, MAJCOMs, facilities engineering field divisions or activities, or area support activities, who provide technical and management guidance for the conduct of installation pest management operations. Some pest management consultants may be designated by their component as certifying officials.

Quality Assurance Evaluator (QAE)—A quality assurance inspector who is an Air Force employee, trained in pest management, who protects the government's interest through on-site performance evaluation of commercial pest management contracts or other contracts that involve the use of pesticides.